

(FILE 'HOME' ENTERED AT 17:25:25 ON 08 MAY 2000)

INDEX 'ADISALERTS, ADISINSIGHT, AGRICOLA, AIDSLINE, ANABSTR, AQUASCI,
CABA, BIOBUSINESS, BIOCOMMERCE, BIOSIS, BIOTECHABS, BIOTECHDS, BIOTECHNO,
CANCERLIT, CAPLUS, CEABA, CEN, CIN, CONFSCI, CROPB, CROPU, DDFB, DDFU,
DGENE, DRUGB, DRUGLAUNCH, DRUGMONOG2, ...' ENTERED AT 17:25:33 ON 08 MAY
2000

E FISCHER, D?/AU.
SEA E1-E11 AND MICROPHTHALMIA

0* FILE ADISINSIGHT
0* FILE BIOCOMMERCE
0* FILE CIN
0* FILE DRUGLAUNCH
0* FILE DRUGMONOG2
0* FILE DRUGNL
0* FILE FOREGE
0* FILE PHAR
0* FILE PHIC
0* FILE PHIN

L1 QUE ("FISCHER, D S"/AU OR "FISCHER, D W"/AU OR "FISCHER,
D?"/AU

SEA FISCHER AND MICROPHTHALMIA

1 FILE BIOBUSINESS
5 FILE BIOSIS
1 FILE CABA
1 FILE CANCERLIT
5 FILE CAPLUS
5 FILE EMBASE
1 FILE ESBIODASE
1 FILE HEALSAFE
2 FILE LIFESCI
5 FILE MEDLINE
2 FILE NIOSHTIC
3 FILE SCISEARCH
10 FILE TOXLINE
5 FILE TOXLIT

L2 QUE FISCHER AND MICROPHTHALMIA

FILE 'TOXLINE, BIOSIS, CAPLUS, EMBASE, MEDLINE, TOXLIT, SCISEARCH,
LIFESCI, NIOSHTIC, BIOBUSINESS, CABA, CANCERLIT, ESBIODASE, HEALSAFE'
ENTERED AT 17:28:22 ON 08 MAY 2000

L3 0 S FISCHER AND MICROPHTHALMIA AND MELANOMA
L4 47 S FISCHER AND MICROPHTHALMIA
L5 8 DUP REM L4 (39 DUPLICATES REMOVED)

INDEX 'ADISALERTS, ADISINSIGHT, AGRICOLA, AIDSLINE, ANABSTR, AQUASCI,
CABA, BIOBUSINESS, BIOCOMMERCE, BIOSIS, BIOTECHABS, BIOTECHDS, BIOTECHNO,
CANCERLIT, CAPLUS, CEABA, CEN, CIN, CONFSCI, CROPB, CROPU, DDFB, DDFU,
DGENE, DRUGB, DRUGLAUNCH, DRUGMONOG2, ...' ENTERED AT 17:30:25 ON 08 MAY
2000

SEA (MICROPHTHALMIA OR MI OR MYC-RELATED B-HLH-ZIP)

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2462  FILE ADISALERTS
      82  FILE ADISINSIGHT
      763  FILE AGRICOLA
17398  FILE AIDSLINE
      107  FILE ANABSTR
      610  FILE AQUASCI
      3776  FILE BIOBUSINESS
      30  FILE BIOCOMMERCE
      8795  FILE BIOSIS
      140  FILE BIOTECHABS
      140  FILE BIOTECHDS
      1438  FILE BIOTECHNO
      1299  FILE CABA
30238  FILE CANCERLIT
      9106  FILE CAPLUS
      94  FILE CEABA
      34  FILE CEN
      1790  FILE CIN
      161  FILE CONFSCI
      5  FILE CROPB
      180  FILE CROPU
      97  FILE DDFB
10227  FILE DDFU
      331  FILE DGENE
      97  FILE DRUGB
      136  FILE DRUGLAUNCH
      273  FILE DRUGMONOG2
      22  FILE DRUGNL
13819  FILE DRUGU
      160  FILE EMBAL
      8805  FILE EMBASE
      1916  FILE ESBIODBASE
      13  FILE FOMAD
      15  FILE FOREGE
      42  FILE FROSTI
      92  FILE FSTA
36824  FILE GENBANK
      109  FILE HEALSAFE
      981  FILE IFIPAT
      1153  FILE JICST-EPLUS
      9  FILE KOSMET
      1251  FILE LIFESCI
264536  FILE MEDLINE
      172  FILE NIOSHTIC
      1702  FILE NTIS
      661  FILE OCEAN
      104  FILE PHAR
      3  FILE PHIC
      682  FILE PHIN
      57020  FILE PROMT
      14714  FILE SCISEARCH
      43576  FILE TOXLINE
      1695  FILE TOXLIT
      12702  FILE USPATFULL
      2575  FILE WPIDS
      2575  FILE WPINDEX

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L6 QUE (MICROPHTHALMIA OR MI OR MYC-RELATED B-HLH-ZIP)

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SEA (MICROPHTHALMIA OR MI OR MYC-RELATED B-HLH-ZIP) AND

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TRANSCR

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2  FILE AGRICOLA
555  FILE AIDSLINE
4  FILE AQUASCI

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202 FILE BIOSIS
 4 FILE BIOTECHABS
 4 FILE BIOTECHDS
 132 FILE BIOTECHNO
 10 FILE CABA
 1750 FILE CANCERLIT
 183 FILE CAPLUS
 1 FILE CEABA
 3 FILE CIN
 1 FILE CONFSCI
 15 FILE DDFU
 18 FILE DRUGU
 8 FILE EMBAL
 166 FILE EMBASE
 108 FILE ESBIODBASE
 1 FILE FSTA
 148 FILE GENBANK
 2 FILE IFIPAT
 20 FILE JICST-EPLUS
 68 FILE LIFESCI
 2846 FILE MEDLINE
 3 FILE NTIS
 3 FILE PHIN
 18 FILE PROMT
 303 FILE SCISEARCH
 614 FILE TOXLINE
 71 FILE TOXLIT
 665 FILE USPATFULL
 3 FILE WPIDS
 3 FILE WPINDEX

L7 QUE (MICROPHTHALMIA OR MI OR MYC-RELATED B-HLH-ZIP) AND
 TRANSCR

FILE 'MEDLINE, CANCERLIT, USPATFULL, TOXLINE, AIDSLINE, SCISEARCH,
 BIOSIS, CAPLUS, EMBASE, GENBANK, BIOTECHNO, ESBIODBASE, TOXLIT, LIFESCI,
 JICST-EPLUS, DRUGU, PROMT, CABA, EMBAL, AQUASCI, BIOTECHDS, CIN, NTIS,
 PHIN, WPIDS, AGRICOLA, IFIPAT, CEABA, CONFSCI, ...' ENTERED AT 17:36:13
 ON 08 MAY 2000

L8 7912 S (MICROPHTHALMIA OR MI OR MYC-RELATED B-HLH-ZIP) AND
 TRANSCRIP

L9 18 S L8 AND FISCHER
 L10 18 DUP REM L9 (0 DUPLICATES REMOVED)
 L11 376 S L8 AND MELANOMA
 L12 0 S L8 AND (MICROPHTHALMIA OR MI OR MYC-RELATED B-HLH-ZIP) (10W)M
 L13 41 S L8 AND (MICROPHTHALMIA OR MI OR MYC-RELATED B-HLH-ZIP) (10W)M
 L14 7 DUP REM L13 (34 DUPLICATES REMOVED)

L7 ANSWER 8 OF 10 SCISEARCH COPYRIGHT 2000 ISI (R)
AN 1998:288448 SCISEARCH
GA The Genuine Article (R) Number: ZD914
TI MITF regulation in melanoma cells: Contrasts with
normal melanocytes
AU OlaizolaHorn S (Reprint); Park H Y; Gilchrest B A
CS BOSTON UNIV, DEPT DERMATOL, BOSTON, MA 02118
CYA USA
SO JOURNAL OF INVESTIGATIVE DERMATOLOGY, (APR 1998) Vol. 110, No. 4, pp.
711-711.
Publisher: BLACKWELL SCIENCE INC, 350 MAIN ST, MALDEN, MA 02148.
ISSN: 0022-202X.
DT Conference; Journal
FS LIFE; CLIN
LA English
REC Reference Count: 0

20106828

TI Expression of genes for microphthalmia isoforms, Pax3 and MSG1, in human melanomas.

AU Vachtenheim J; Novotna H

CS Laboratory of Molecular Biology, University Hospital, 3rd Medical Faculty,

Charles University, Prague 8-Bulovka, Czech Republic.. jivach@upn.anet.cz

SO CELLULAR AND MOLECULAR BIOLOGY, (1999 Nov) 45 (7) 1075-82.

Journal code: BNA. ISSN: 0145-5680.

CY France

DT Journal; Article; (JOURNAL ARTICLE)

LA English

FS Priority Journals

EM 200005

EW 20000503

AB Microphthalmia (MITF) gene product, a transcription factor of the basic-helix-loop-helix type, is thought to play a role in the regulation of genes encoding the enzymes necessary for melanogenesis. These include tyrosinase, TRP-1 and TRP-2. Melanocyte-specific isoform of microphthalmia, MITF-M, is expressed in normal and malignant melanocytes. The presence of two other isoforms of microphthalmia, MITF-A and MITF-H, which differ from MITF-M in the amino-terminus, was demonstrated also in some non-melanocytic lineages. Here we have analyzed the presence of all three known isoforms of MITF mRNA in a panel of 17 human melanoma cell lines by a reverse transcriptase-polymerase chain reaction using isoform-specific primers. While, as expected, the predominant form in melanoma cell lines was MITF-M, low amounts of MITF-A mRNA was found in almost all melanomas, as well as in most of 20 tumor cell lines of the non-melanocyte origin (lung and colon carcinomas, osteosarcomas and neuroblastomas). The expression of MITF-H was not detected, with a few exceptions, in the tested cell lines. Pax3 transcription factor was reported earlier to regulate positively the melanocyte-specific promoter of the MITF gene. We found here that the Pax 3 mRNA was expressed in all melanoma cell lines, even in those that had repressed the MITF-M and were amelanotic. This suggests that additional factors, besides Pax3, are required for the MITF expression. The MSG1 (melanocyte-specific gene 1), a gene originally isolated from melanocytes and containing a strong transcription activation domain, was also found expressed in all melanomas and most non-melanocyte tumor cell lines. Together, these data indicate that the MITF-M isoform is the major type

of

MITF mRNA present in human melanoma cell lines and show that the expression of the isoform MITF-A and the MSG1 is not restricted to malignant melanocytes and occurs in a wide range of tumor cell lines.

TI The melanocyte-specific isoform of the **microphthalmia**
transcription factor affects the phenotype of human melanoma
 AU Selzer, Edgar; Wacheck, Volker; Lucas, Trevor; Heere-Ress, Elisabeth; Wu,
 Min; Weilbaecher, Katherine N.; Schlegel, Werner; Valent, Peter; Wrba,
 Fritz; Pehamberger, Hubert; Fisher, David; Jansen, Burkhard
 CS Department of Radiotherapy and Radiobiology, Center of Excellence for
 Clinical and Experimental Oncology, University Hospital Vienna, Vienna,
 1090, Austria
 SO Cancer Research (2002), 62(7), 2098-2103
 CODEN: CNREA8; ISSN: 0008-5472
 PB American Association for Cancer Research
 DT Journal
 LA English
 AB The **microphthalmia transcription** factor MITF plays a
 pivotal role in the development and differentiation of melanocytes. The
 purpose of this work was to investigate the expression and function of the
 melanocyte-specific isoform MITF-M in human melanoma. The authors found
 that MITF-M is repressed in 8 of 14 established melanoma cell lines
 tested. Transfection of MITF-M into a melanoma cell line (518A2) lacking
 the M-isoform and into a permanent cell line established from normal
 melanocytes (NMel-II) resulted in slower **tumor** growth in a
 severe combined immunodeficient-mouse xenotransplantation model. The
 growth difference between vector control-transfected tumors derived from
 the NMel-II cell line (mean **tumor** wt., 3.2 g) and MITF-M (+)
 transfectants (mean **tumor** wt., 1.1 g) was significant. The mean
tumor wt. of control-transfected 518A2 tumors was 0.99 g and of
 MITF-M (+) transfectants, 0.69 g. The difference in growth between 518A2
 controls and the MITF-M (+) transfectants was clear, however it did not
 reach statistical significance. In addn. to the growth-inhibitory
 effects, MITF-M expression led to a change in the histopathol. appearance
 of tumors from epithelioid toward a spindle-cell type in vivo. These
 results indicate a role for the MITF-M isoform in the in vivo growth
 control and the phenotype of human melanoma. In conclusion, MITF-M may
 qualify as a marker capable of identifying subgroups of melanoma patients
 with different **tumor** biol. and prognosis.